

HU:MGSDVRLDNALLPAVPSLGGGGGCGALPVSGAAQWAFVLDFAFPFGASAYGSL  
MO:MGSDVRLDNALLPAVSSSLGGGGGCGLPVSGAAQWAFVLDFAFPFGASAYGSL

HU:GGPAPPPAPPPPPPPPPHSPFIQEP SWGGAEPHEEQCLSAFTVHFSGQFTGTAG  
MO:GGPAPPPAPPPPPPPPPHSPFIQEP SWGGAEPHEEQCLSAFTLHFSGQFTGTAG

HU:ACRYGPFPGPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQGYSTVTFDGTFS  
MO:ACRYGPFPGPPPSQASSGQARMFPNAPYLPSCLESQPTIRNQGYSTVTFDGAPS

HU:YGHTPSHHAAQFPNHSFKHEEDPMGQQGSLGEQQYSVPPFVYGCHTPTDSC TG  
MO:YGHTPSHHAAQFPNHSFKHEEDPMGQQGSLGEQQYSVPPFVYGCHTPTDSC TG

HU:SQALLLRTPYSSDNLYQMTS QLECMTNQMNLGATLKGVAAAGSSSSSVKWTE  
MO:SQALLLRTPYSSDNLYQMTS QLECMTNQMNLGATLKGMAGSSSSSVKWTE

HU:GQSNHSTGYESDNHTTPILCGAQYRIHTHG VFRGIQDVRRVPGVAPTLVRSAS  
MO:GQSNHGIGYESDNHTAPILCGAQYRIHTHG VFRGIQDVRRVSGVAPTLVRSAS

HU:ETSEKRPFMCAYPGCNRYFKLSHLQMHSRKHTGEKPYQCDKDCERRFSR  
MO:ETSEKRPFMCAYPGCNRYFKLSHLQMHSRKHTGEKPYQCDKDCERRFSR

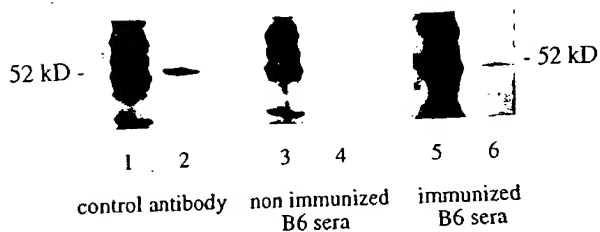
HU:SDQLKRHRRTG VKPFQCKTCQRKFSRSDHLKTHTRTHTGKTSEKPFSCR  
MO:SDQLKRHRRTG VKPFQCKTCQRKFSRSDHLKTHTRTHTGKTSEKPFSCR

HU:WPSCQKKFARSDELVRHENMHQRNMTKLQ LAL  
MO:WHSCQKKFARSDELVRHENMHQRNMTKLHVAL

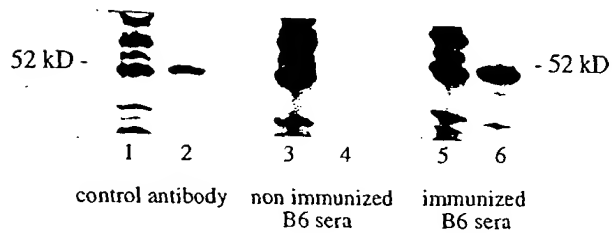
FIG. 1



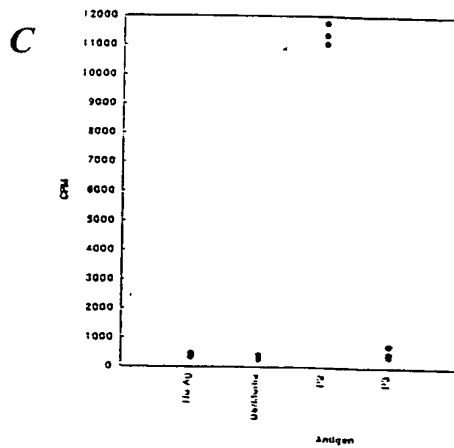
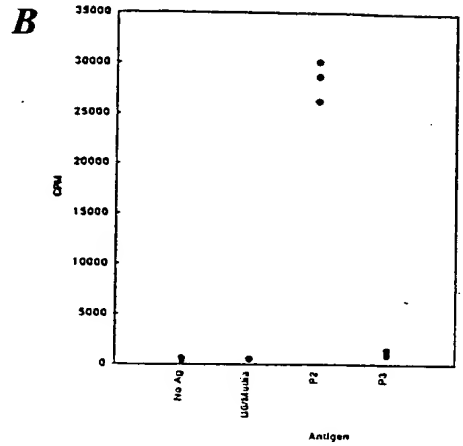
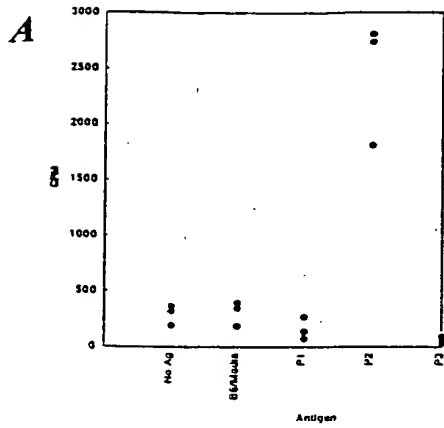
**FIG. 2**



**FIG. 3**

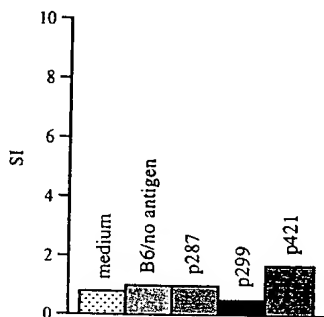
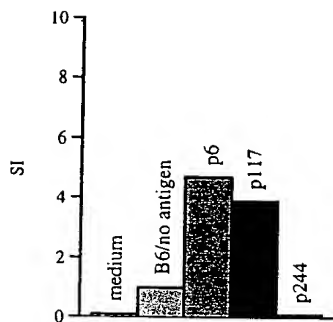


**FIG. 4**

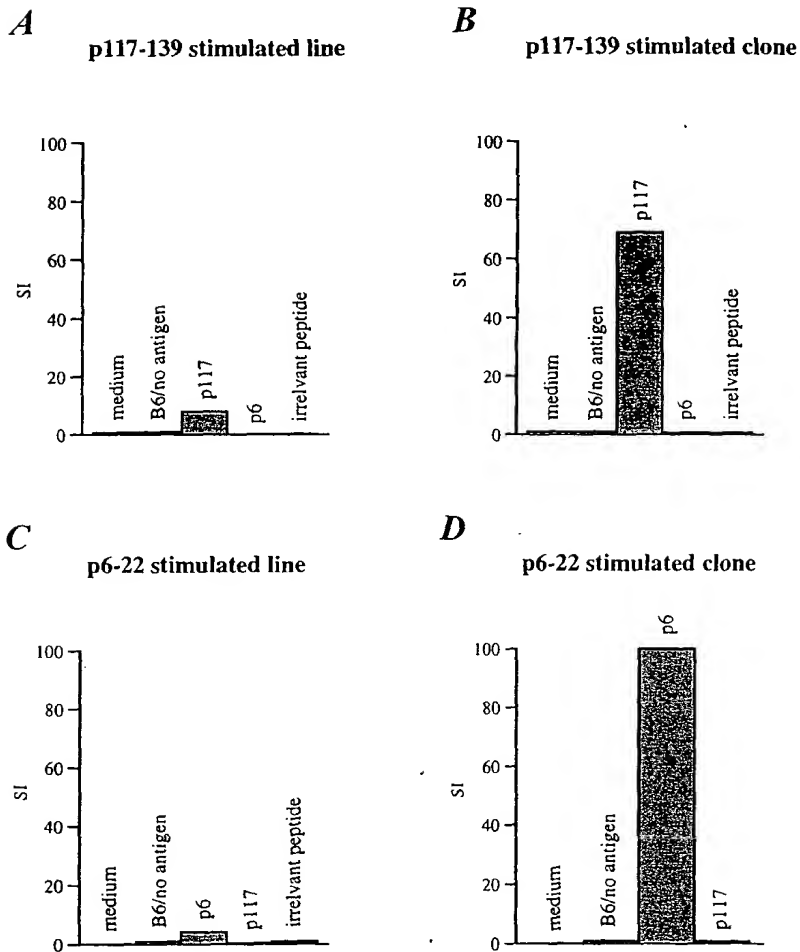


**FIG. 5A-5C**

**A** Vaccine A stimulated line      **B** Vaccine B stimulated line



**FIG. 6A and 6B**



**FIG. 7A-7D**

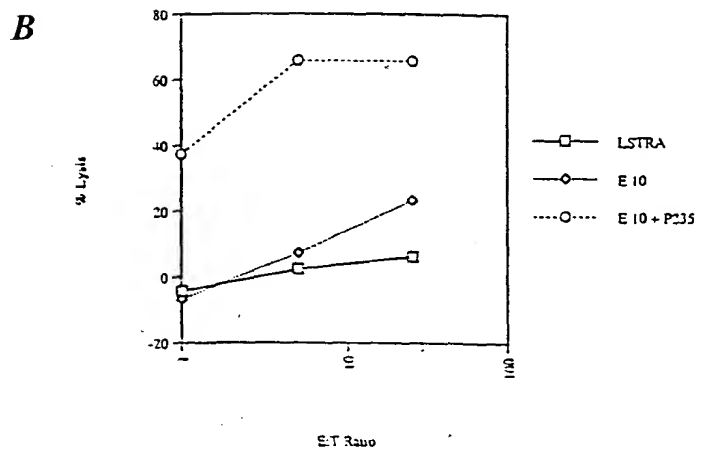
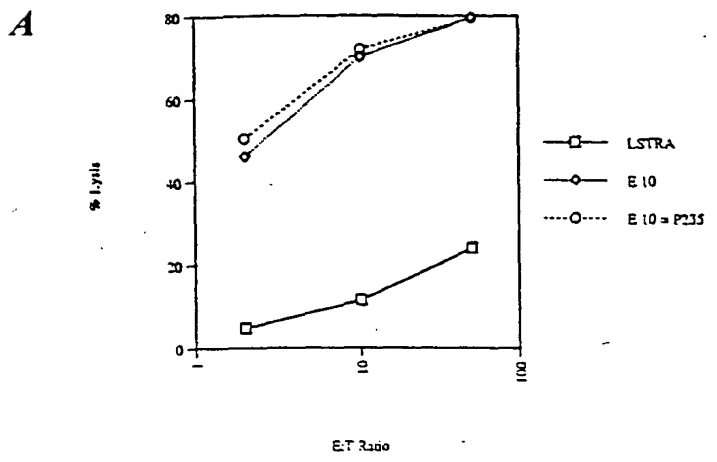
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75  
MGSDVRDLNALLPAVPSLGGGGGCGALPVSGAAQWAPVLDFAFPGASAYGSLGGPAPPPPPPPPPHSEIKQE  
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA  
.....RRRR.....  
.....  
.....  
80 85 90 95 100 105 110 115 120 125 130 135 140 145 150  
PSWGGAEPEEEQLSAFTVHFSGQFTGTAGACRYGPFQPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQYS  
.....AAA.....AAAA.....AAA.....AAAAA.....  
.....RRRR.....RRRR.....  
.....DDDDDDDD.....  
.....  
155 160 165 170 175 180 185 190 195 200 205 210 215 220 225  
TVTFDGTPSYGHTPSHHAAQFPNHSFKHEDPMGQCGSLGEQQYSVPPPVYGCHTPTDSCGSQLLLRTPYSSDN  
.....AAAAA.....AAAAA.....AA  
.....RRRR.....  
.....DDDDDDDDDDDDDD.....  
.....  
230 235 240 245 250 255 260 265 270 275 280 285 290 295 300  
LYQMTSQLCMTWNQMNLGATLKGVAAGSSSSVKGTEGQSNHSTGYESDNHTPILCGAQYRIHTHGVFRGIQDV  
AAAAAAAA.....AAA.AAA.....AAAAAAAAAAAA  
.....RRRRRRRRRR.....RRRR.....RRRR.....  
DDDDDD.....DDDDDDDDDD.....dddd.....  
.....  
305 310 315 320 325 330 335 340 345 350 355 360 365 370 375  
RRVPGVAPTLVRSASETSEKRPFCAYPGCNKRYFKLSHLQMHRSKHTGZKPYQCFDCERRFRSDQLKRHQR  
AAAAA.....AAAAAAAAAAAA.....AAAA.AAAAAAAAAA  
.....RRRR.....RRRR.....  
.....DDDDDD.....  
.....  
380 385 390 395 400 405 410 415 420 425 430 435 440 445 450  
RHTGVKPFQCKTCQRKFSRSDHLKTHTRHTGKTSEKPFSCRWPSCQKKFARSDLVRRHNMHQRNMTKLQLAL  
.....AAAA.AAAA.AA.....AAAA.....AAA.....AAAAA.....AAA.....  
.....RRRR..RRRR.....  
.....  
.....dddddddddd.....

FIG. 8A

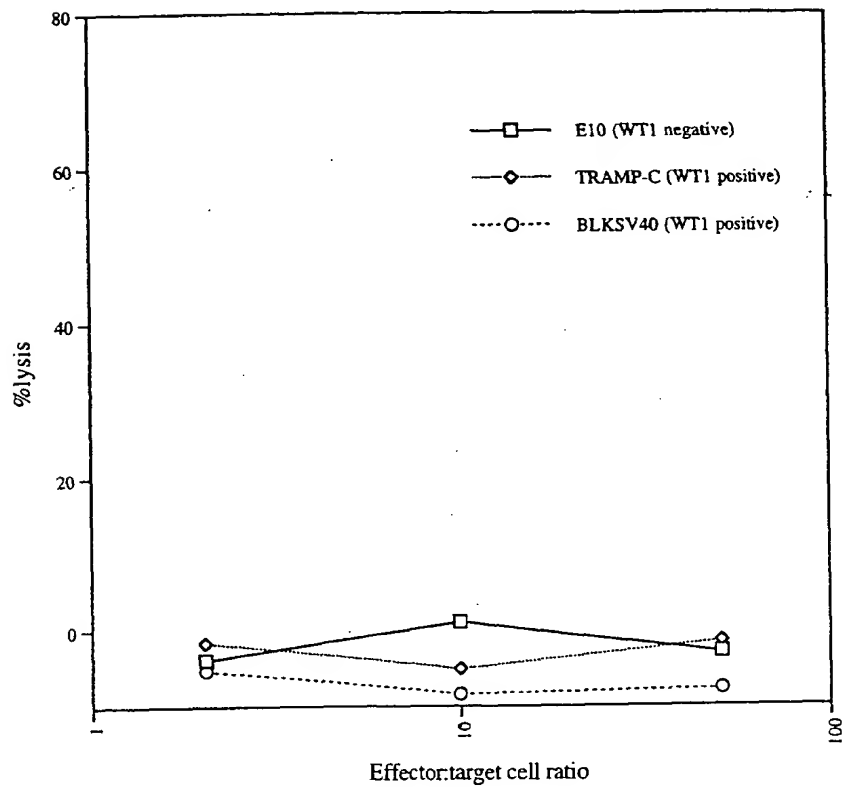


5 10 15 20 25 30 35 40 45 50 55 60 65 70 75  
MGSDVRDLNALLPAVSSILGGGGGCGLPVSGAACWAPVLDFAPPGASAYGSLGGPAPPPAPPPPPPPHPSFIKQE  
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA.....  
.....RRRR.....  
.....  
80 85 90 95 100 105 110 115 120 125 130 135 140 145 150  
PSWGGAEPEEQCLSAFTLHFSGQFTGTAGACRYG?FGPPPPSQASSGQARMFPNAPYLPSCLESQPTIRNQYS  
.....AAAA.....AAA.....AAAAA.....  
.....RRRR.....RRRR.....  
.....DDDDDDDD.....  
.....  
155 160 165 170 175 180 185 190 195 200 205 210 215 220 225  
TVTFDGAPSYGHTPSHHAAQFPNHSEFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSC?GSGALLRTPYSSDN  
.....AAAA.....AAAAA.....AA  
.....RRRR.....  
.....DDDDDDDDDDDDDD.....  
.....  
230 235 240 245 250 255 260 265 270 275 280 285 290 295 300  
LYQMTSQLECM?WNQMNLGATLKGMAAGSSSVKWTGQSNHIGIGYESDNHTAPILCGACYRIHTHGVERGIQDV  
AAAAAAAA.....AAA.AAA.....AAAAAAAAAA  
.....RRRRRRRRRR.....RRR.....RRRR.....  
DDDDDD.....DDDDDDDDDD.....  
.....ddddd.....  
.....  
305 310 315 320 325 330 335 340 345 350 355 360 365 370 375  
RRVSGVAPT?LVRSASETSEKRP?MCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDEKDCERRF?SRSDQLKRHR  
AAAAA.....AAAAAAAAA.....AAAA.AAAAAAAAAA  
.....RRRRR.....RRR.....  
DDDDDDDDDD.....  
.....  
380 385 390 395 400 405 410 415 420 425 430 435 440 445 450  
RHTGVKPFQCKTCQRKFSRSDHLKTHTRHTGKTSEKPFSCRWHSCQKKEARSDELVRHHNMHQRNMTKLHVAL  
.....AAAA.AAAA.AA.....AAAA.....AA.....AAAAA.....AAAA.....  
.....RRRR.....RRRR.....  
.....ddddd.....

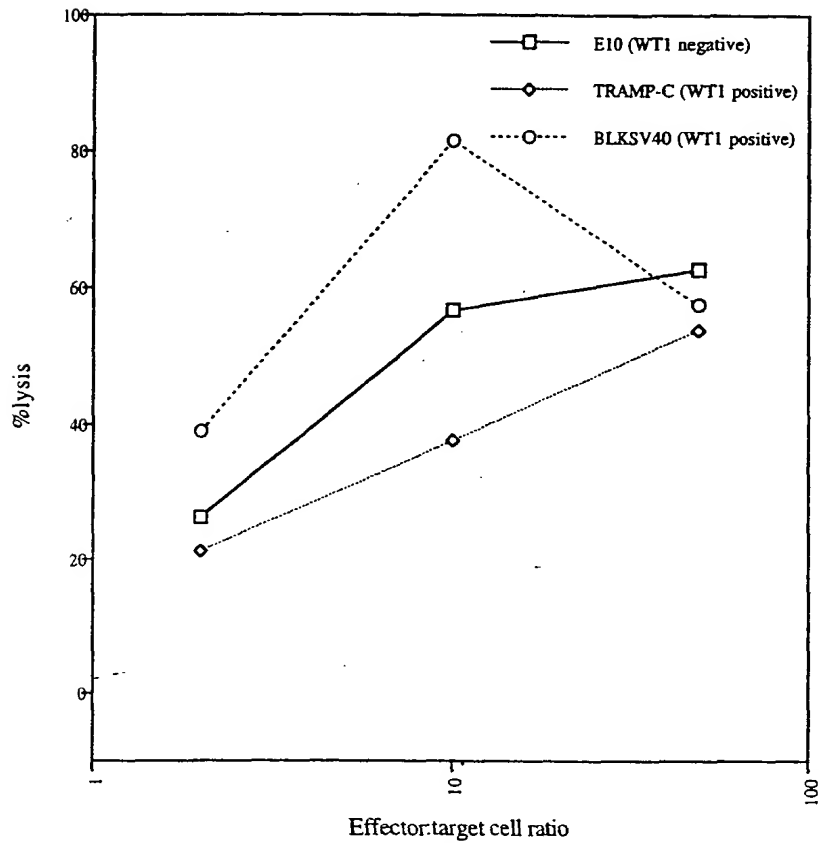
FIG. 8B



**FIG. 9A and 9B**



**FIG. 10A**



**FIG. 10B**

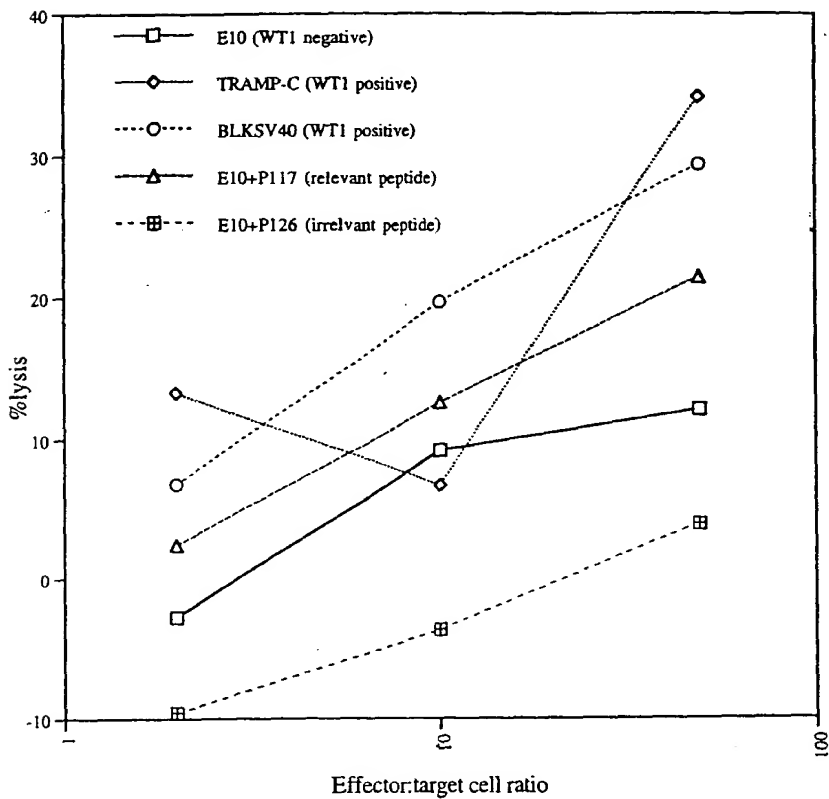
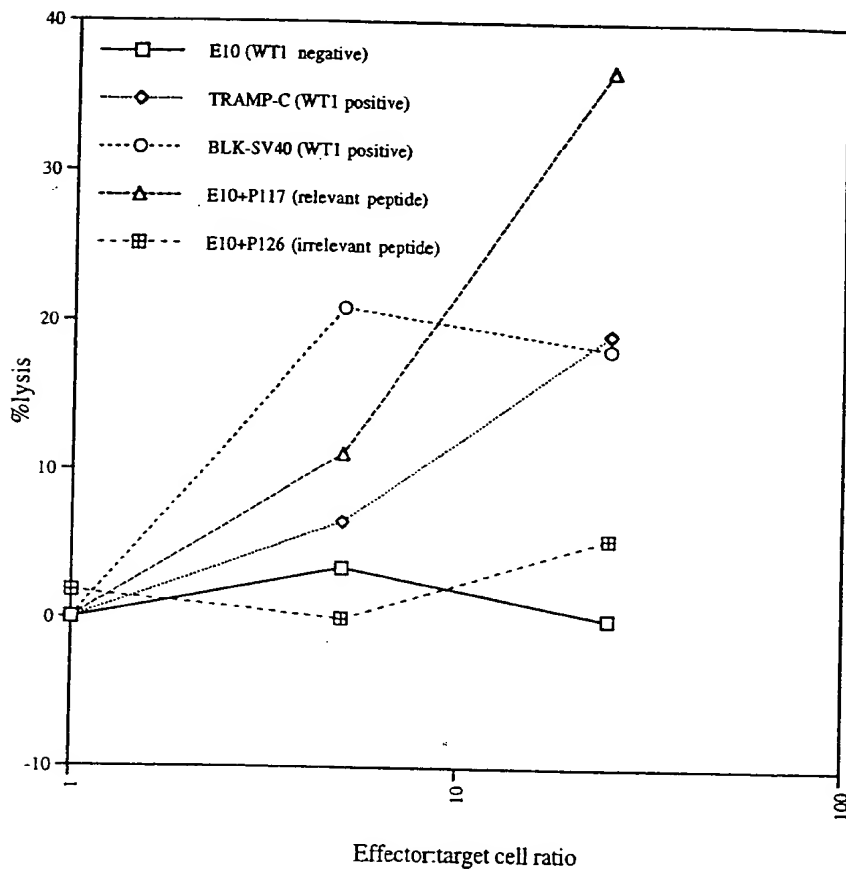
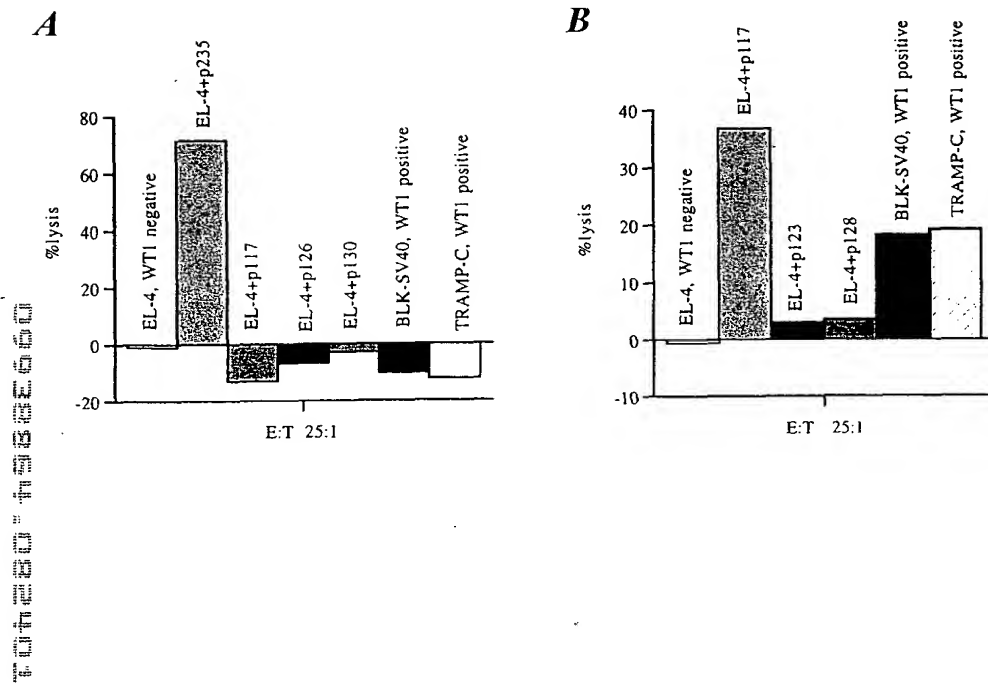


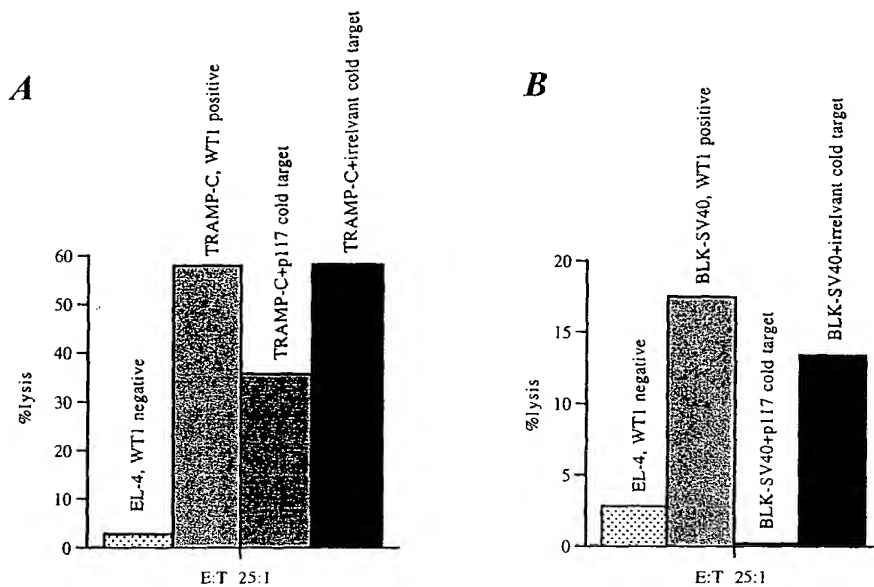
FIG. 10C



**FIG. 10D**



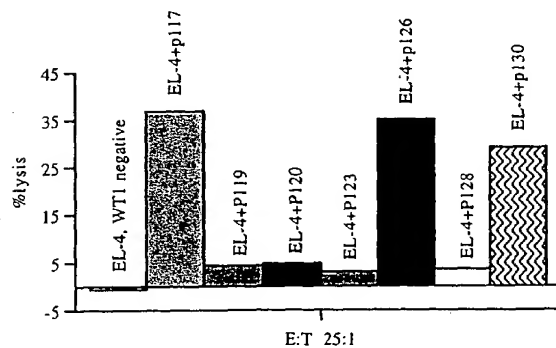
**FIG. 11A and 11B**



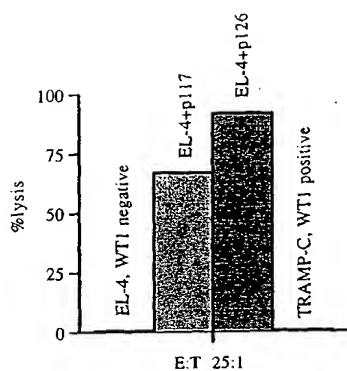
**FIG. 12A and 12B**



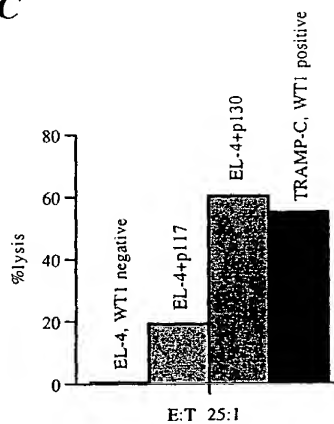
**A**



**B**



**C**



**FIG. 13A-13C**

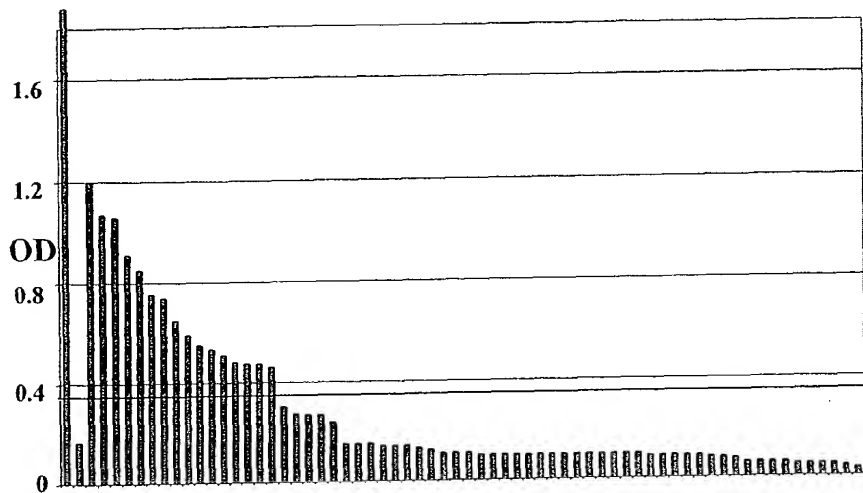


Fig. 14

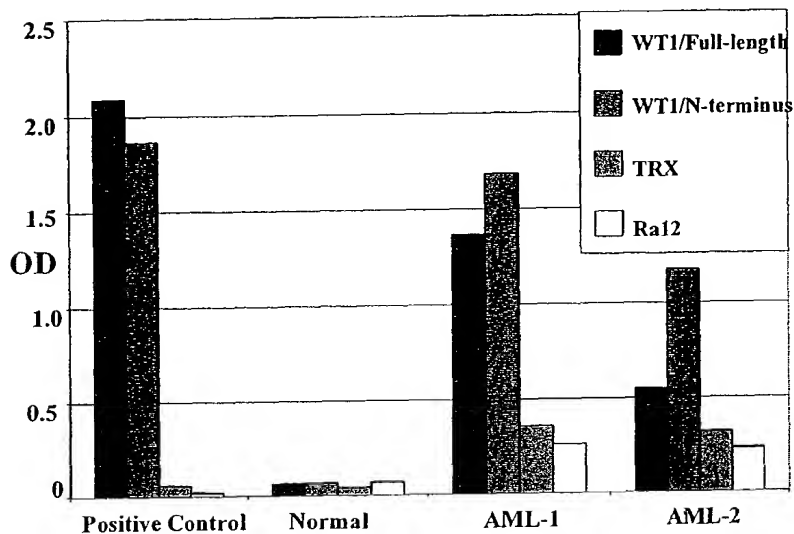


Fig. 15

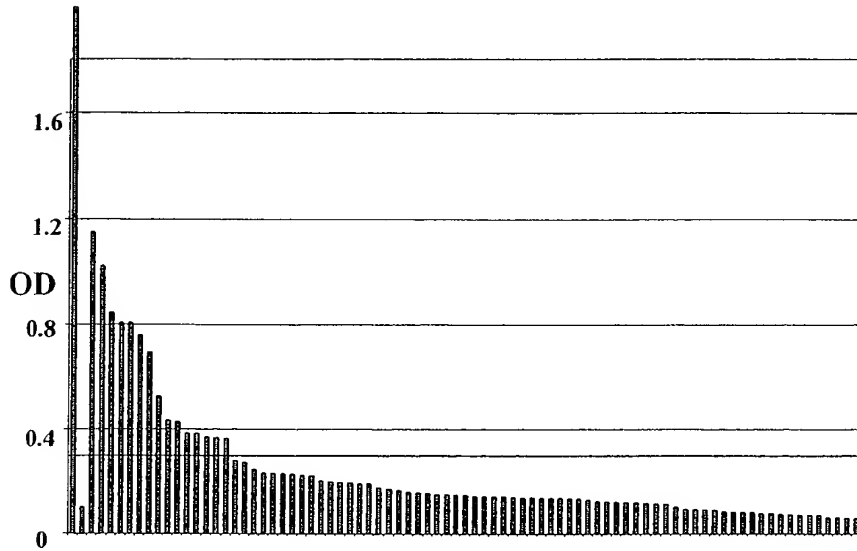


Fig. 16

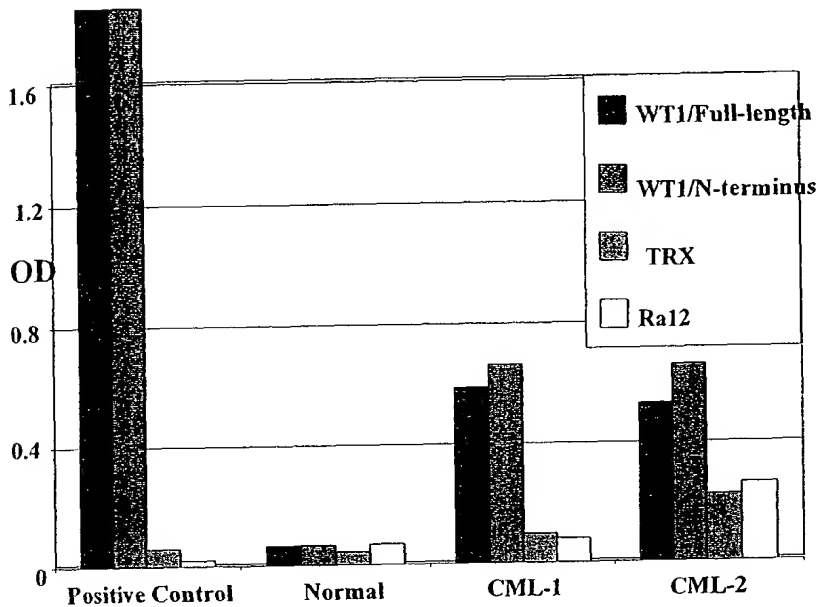


Fig. 17

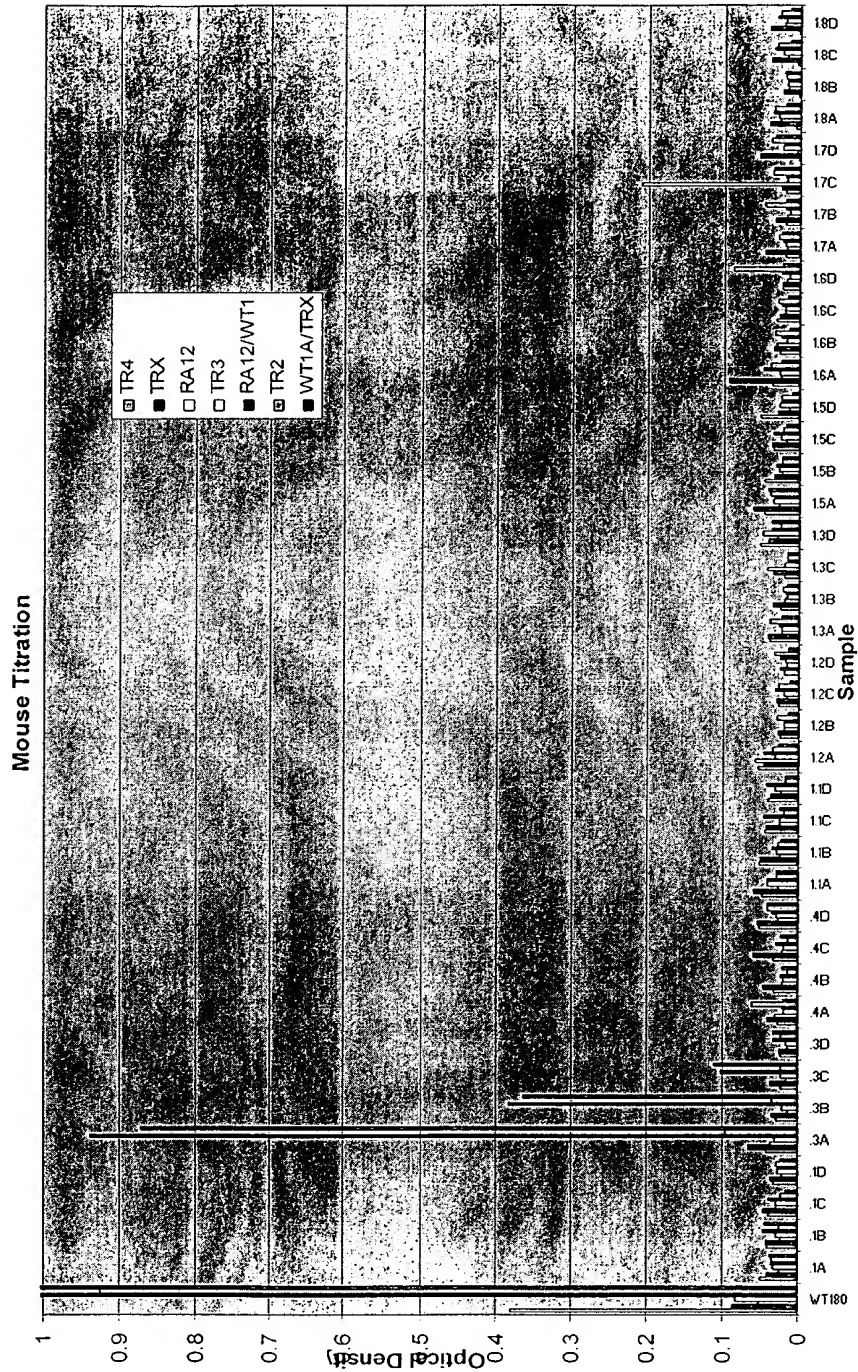
4386660

TABLE 1: Characteristics of Recombinant WT1 Proteins Used for Serological Analysis

Name	Recombinant Protein	WT1 Amino Acid Position	Molecular Weight
WT1/full-length	Ra12-WT1 full length fusion protein	aa 1-449	85kDa
WT1/N-terminus	TRX-WT1 N-terminus fusion protein	aa 1-249	60kDa
WT1/C-terminus	WT1 C-terminus protein	aa 267-449	50kDa

Fig. 18

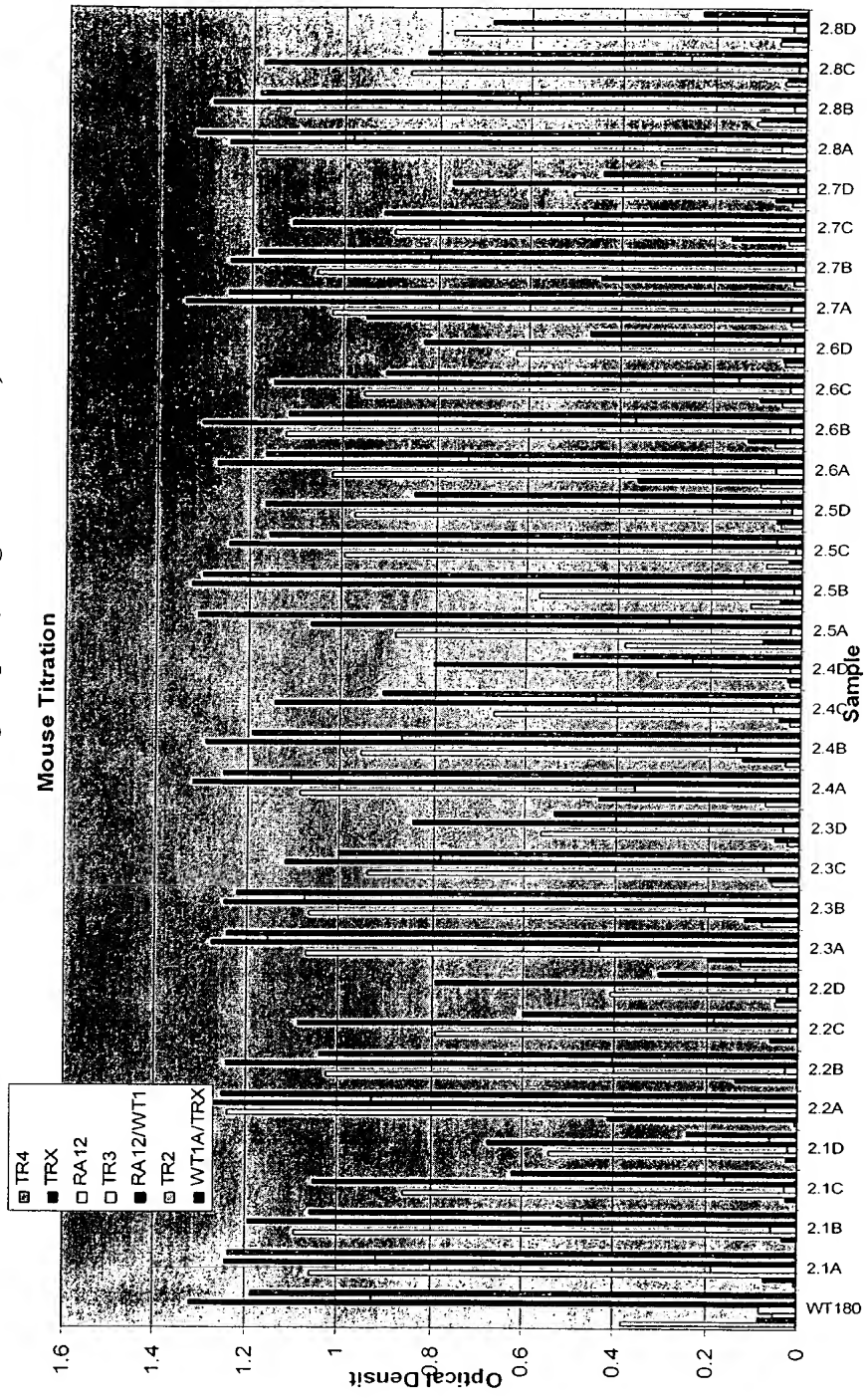
CID000622 Figure 1a Ab responses in group 0 and 1 (controls)



Control groups. A: 1:500 Dilution, B: 1:2000, C: 1: 8000, D: 1:16000

Fig. 19A

CID000622 Figure 1b. Ab responses in group 2 (25ug Ra12/WT1)

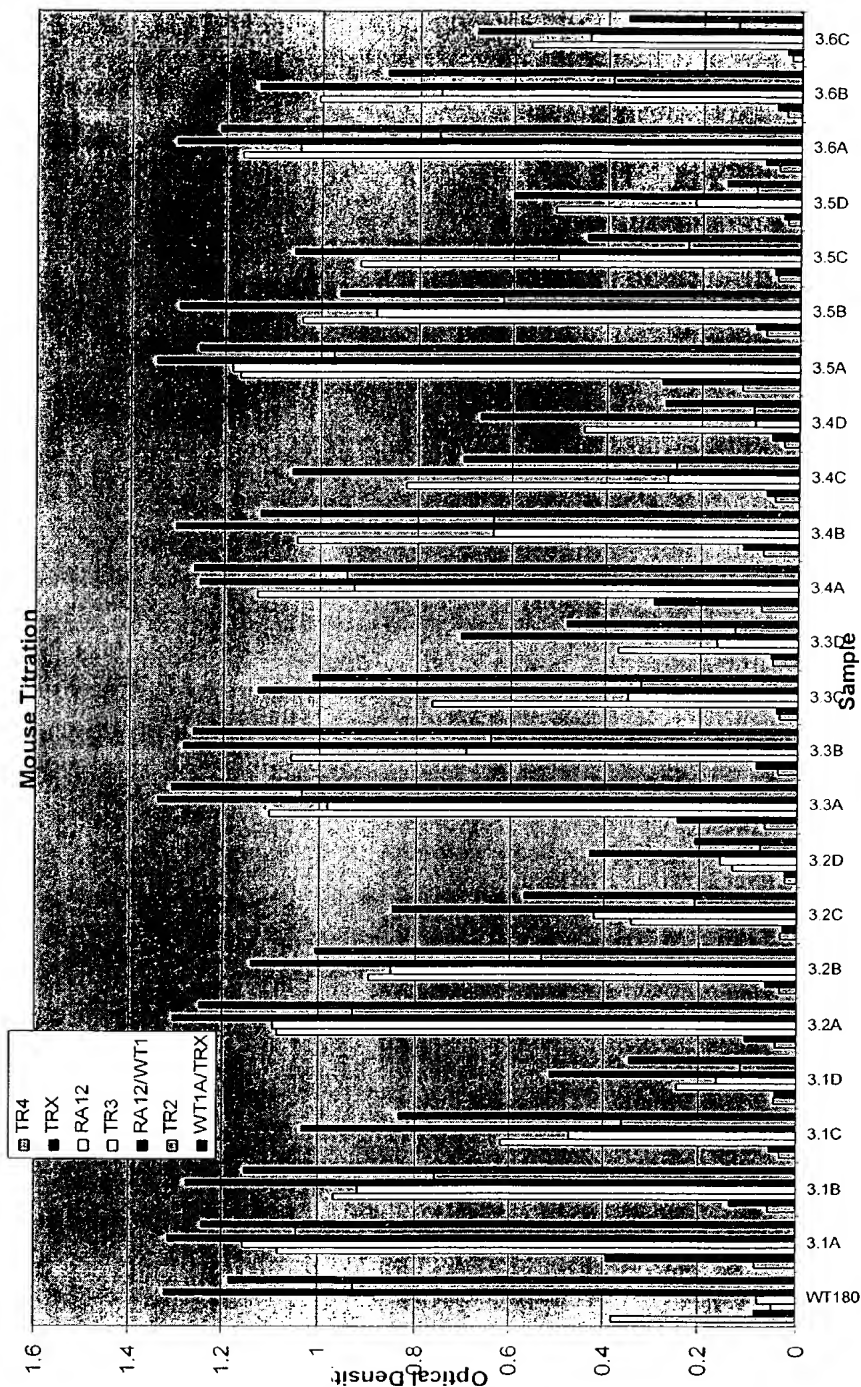


25ug Ra12/WT1+MPL-SE, A: 1;500 Dilution, B: 1:2000, C: 1: 8000, D: 1:16000

FIG. 19B



CID000622 Figure 1c. Ab responses in group 3 (100ug Ra12/WT1)

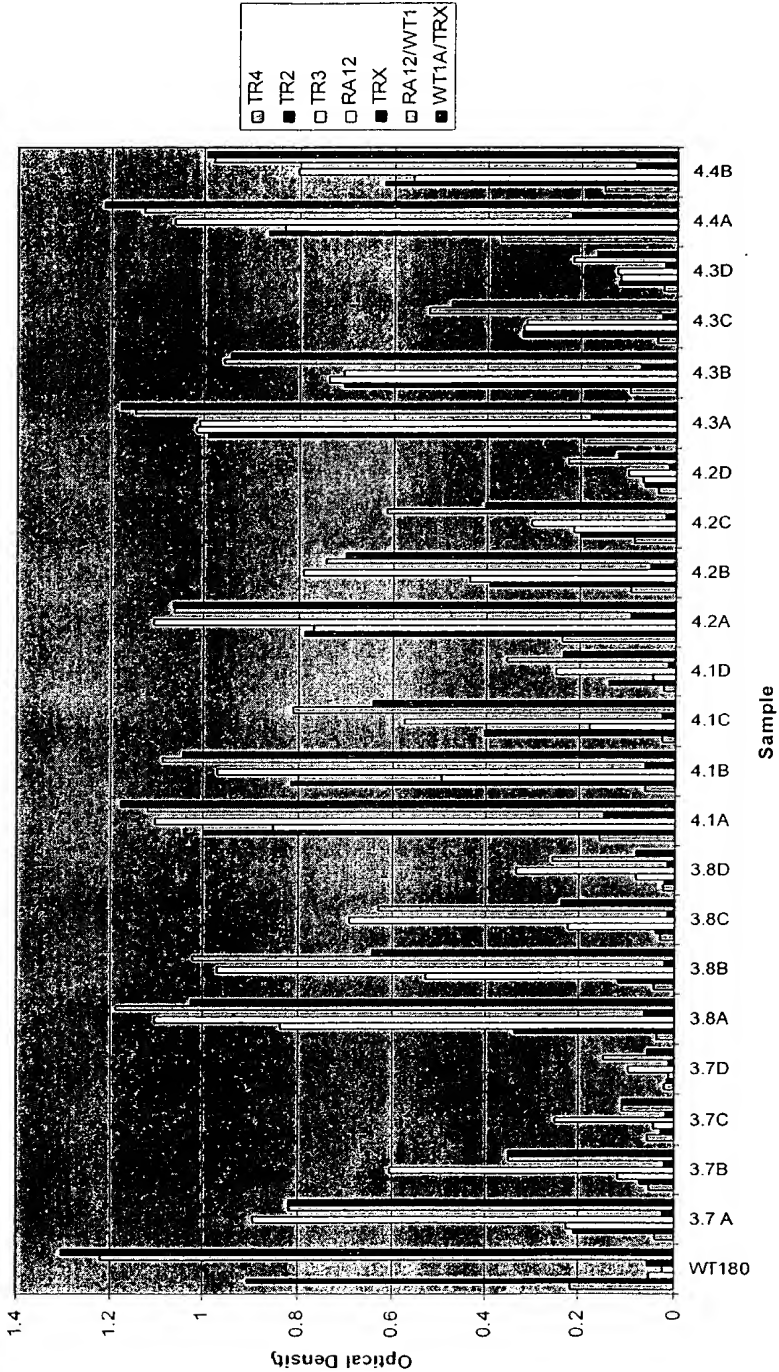


WT1. Dose Titration. Ab responses to WT1. 100ug Ra12-WT1+MPL-SE. A: 1:500 Dilution, B: 1:2000, C: 1: 8000, D: 1:16000

FIG. 19C

CID000622 Figure 1d. Ab responses in groups 3 and 4 (1000ug Ra12/WT1)

Mouse Titration

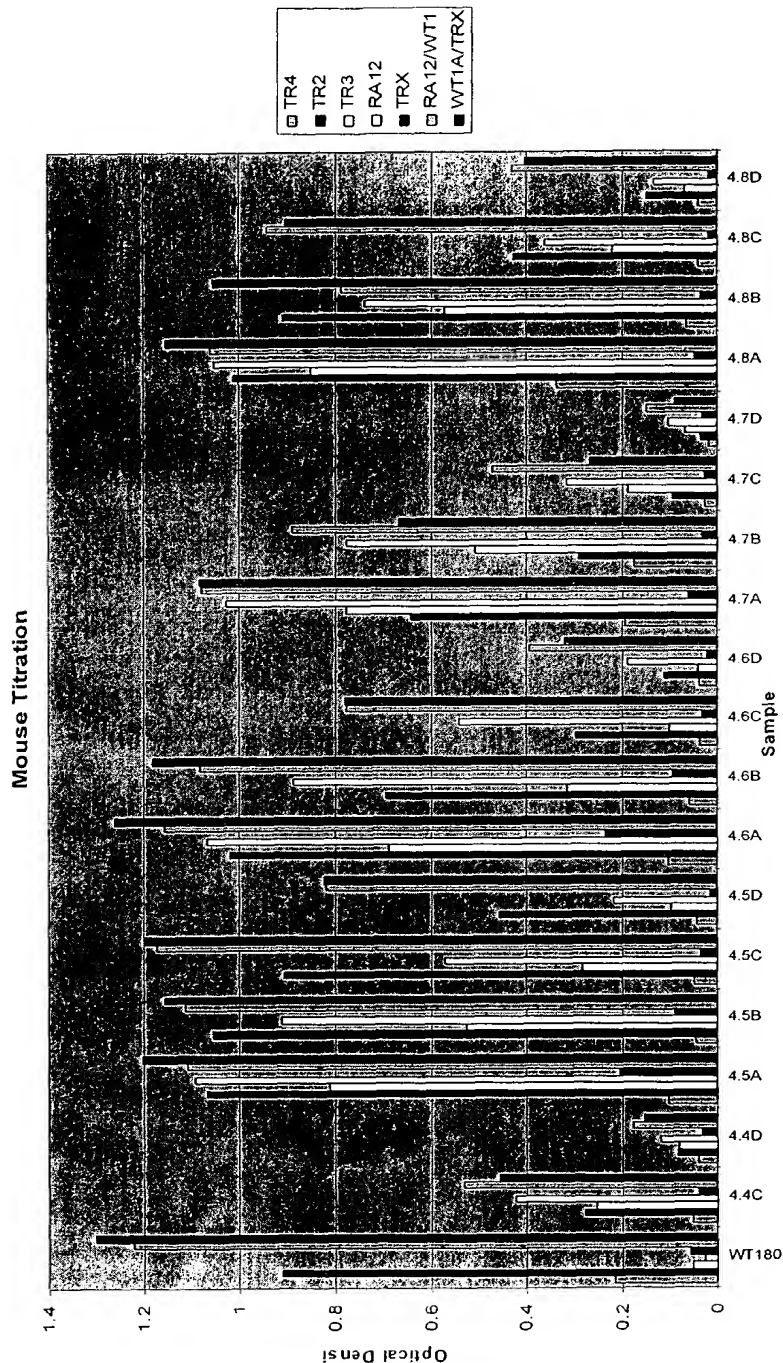


WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE. A: 1:500 Dilution, B: 1:2000, C: 1: 8000, D: 1:16000

FIG. 19D

FIG. 19E

Figure 1e. Ab responses in group 4 (1000ug Ra12/WT1)



WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE. A: 1:500 Dilution,  
 B: 1:2000, C: 1: 8000, D: 1:16000

FIG. 19E

Figure 2a. Proliferative T-cell responses in WT1 protein immunized mice.  
 (Ra12WT1 dose titration, 3x in vivo, after 2IVS)

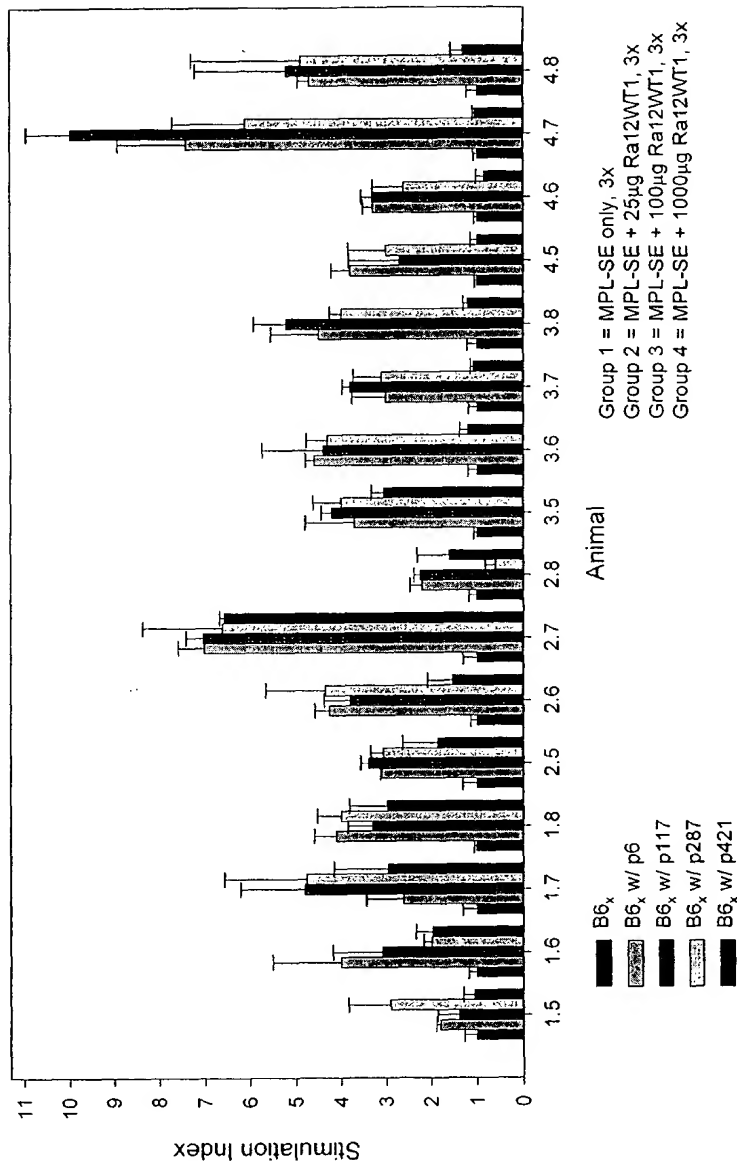


FIG. 20A

T0h230\* n3B22660

Figure 2b. Proliferative T-cell responses in WT1 protein immunized mice (Ra12WT1 dose titration, 6x in vivo, after 2IVS)

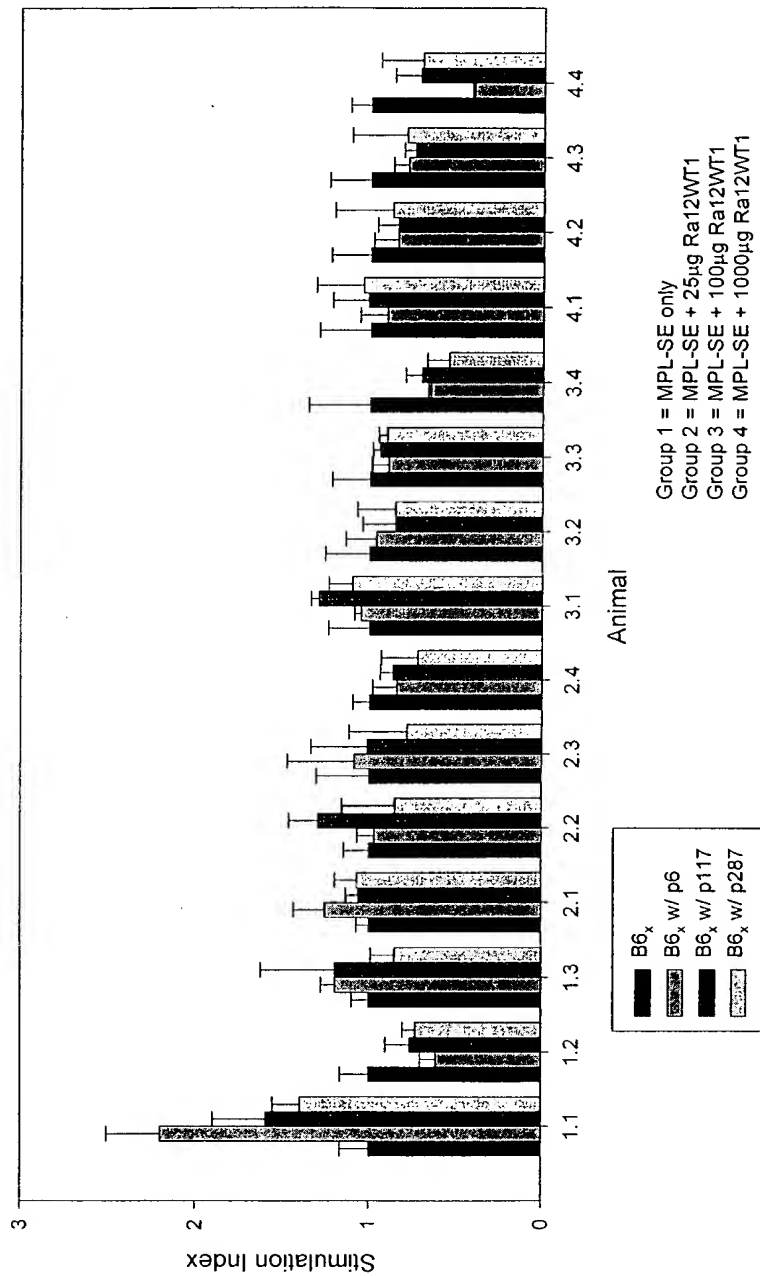
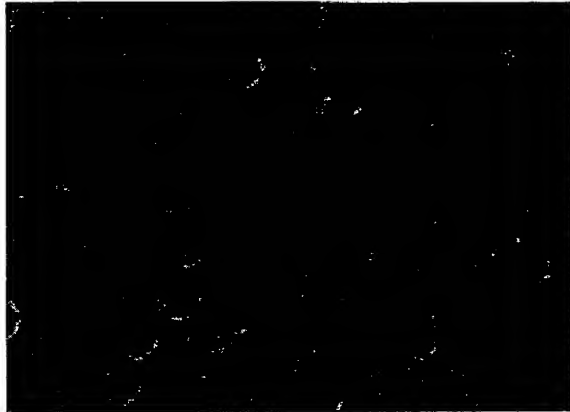


FIG. 20B

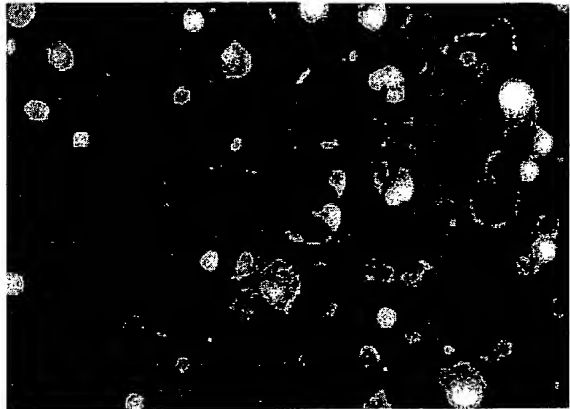
FIG. 21

# Figure 1. WT1 expression in human DC following adeno WT1 and Vaccinia WT1 infection

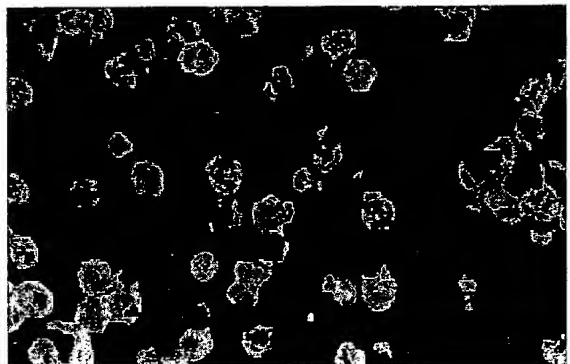
**Control  
(uninfected  
human DC**



**Adeno WT1  
infected human  
DC**

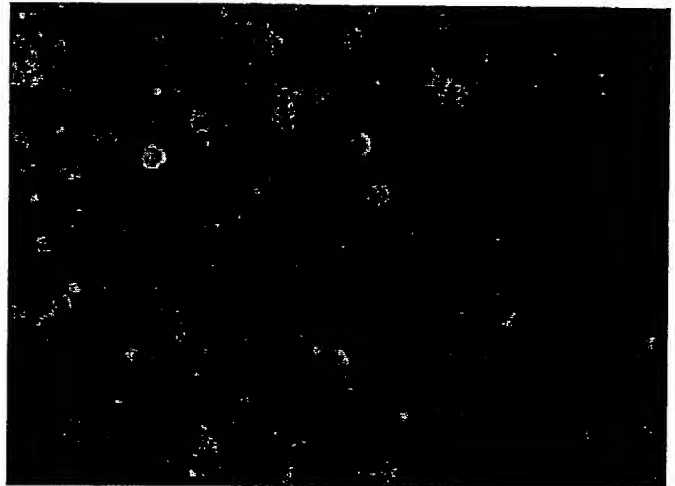


**Vaccinia WT1  
infected human  
DC**



0003884.084401

**Control  
(Adeno EGFP  
infected  
human DC)**



**Adeno WT1  
infected human  
DC**

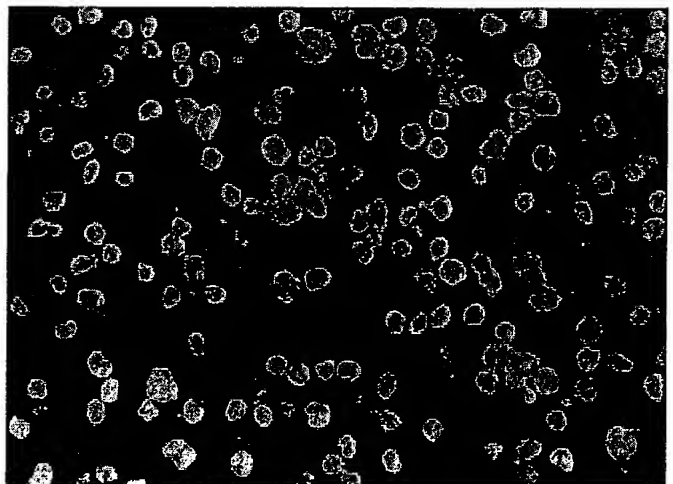
[illegible]

FIG. 23

